

### **Amendments to the Specification:**

Please replace paragraph 2 with the following amended paragraph:

[0002] Latches and flip-flops are widely used in all types of electronic devices for counting, sampling, and storage of data. There are a number of different types of flip-flops named after their primary function, such as D-type flip-flops (data), J-K flip-flops (J and K inputs), and R-S flip-flops (having R and S latches, standard for “reset” and “set”). D flip-flops are clocked flip-flops having one clock pulse delay for its output.

Please replace paragraph 8 with the following amended paragraph:

[0008] Current designs of physical (true) random number generators based on flip-flop metastability use single ~~tapper-buffer-chains~~ tapped-buffer-chain fixed delay values between their inputs to violate setup and hold timings, in order to provoke metastability. Eventually, the metastable state resolves to some logic level, which is effectively random, depending on the internal noise of the flip-flops. However, the fixed delay values used by the prior art can cause the random number generator to be susceptible to environmental changes. In addition, fixed delay values at large manufacturing variations can make the circuit not work at all or not work at optimal speed.